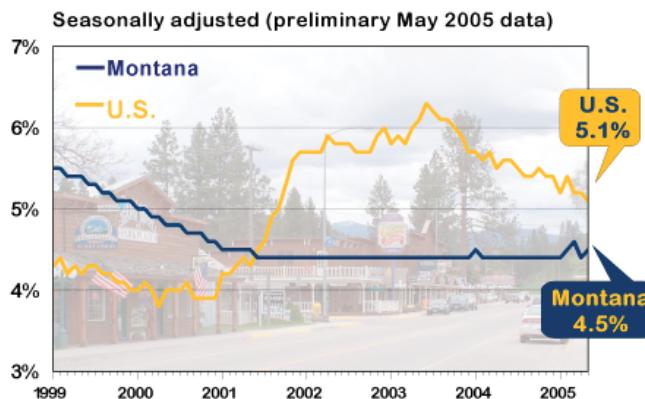


MONTANA Economy at a Glance

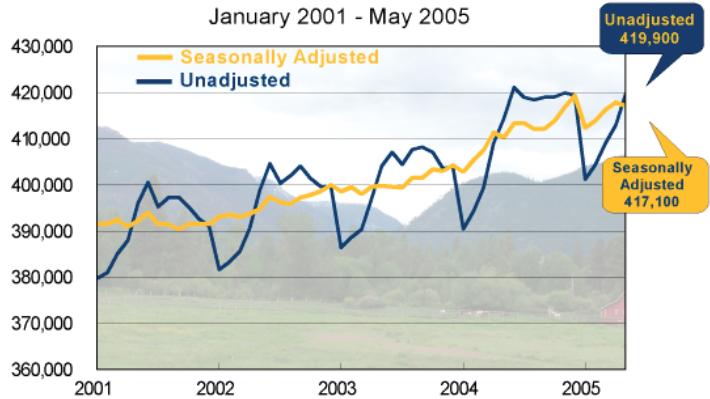
Editor: Robert C. Marvin

Unemployment



Montana's seasonally-adjusted unemployment rate rose slightly to 4.5% in May 2005 from 4.4% in April. This change is not considered statistically significant. Meanwhile, the May 2005 U.S. unemployment rate dropped to 5.1% from 5.2% in April.

Nonfarm Employment Series



Montana's seasonally-adjusted nonagricultural payroll employment was down 800 jobs (-0.2%) over-the-month for May 2005. The largest gains were in Other Services*, which was up by 400 jobs (2.4%); Trade, Transportation, and Utilities, up 300 jobs (0.3%); and Information*, up 200 jobs (2.5%).

*These series are not seasonally adjusted

Employment by Industry

Over-the-year change - Not seasonally adjusted

Industry Employment (in thousands)	May 2005	May 2004	Net Change	Percent Change
Total Non-Agricultural	419.9	414.5	5.4	1.3%
Natural Resources & Mining	7.8	7.0	0.8	11.4%
Construction	25.7	25.2	0.5	2.0%
Manufacturing	19.4	19.0	0.4	2.1%
Trade, Transportation, Utilities	86.8	86.8	0.0	0.0%
Information	8.1	7.8	0.3	3.8%
Financial Activities	21.2	21.0	0.2	1.0%
Professional & Business Services	33.6	33.8	-0.2	-0.6%
Education & Health Services	55.0	54.4	0.6	1.1%
Leisure & Hospitality	56.1	53.3	2.8	5.3%
Other Services	17.4	16.8	0.6	3.6%
Total Government	88.8	89.4	-0.6	-0.7%

New County Fliers Available

The Research and Analysis Bureau is pleased to announce the release of several updated county informational fliers. In the past month, we have released fliers for Lewis & Clark, Silver Bow, Toole, Dawson, Judith Basin, and Deer Lodge Counties. The updated fliers contain information on population, top employers, annual average labor force, employment by industry, farms and ranches, commuting patterns, and local resources. These fliers can be found at www.ourfactsyourfuture.org, or call Rob Marvin at (406) 444-7660 to request printed copies.

What Happened to the County Unemployment Rates?

Local Area Unemployment Statistics (LAUS) estimates are again unavailable at the time of publication. The Bureau of Labor Statistics (BLS) is making significant changes to the LAUS methodology. Implementation of the improved methodology has proven more difficult than the BLS originally anticipated. The BLS tentatively plans to release LAUS data for the current and previous months on June 29th. These will be published in Montana Economy at a Glance as soon as they become available.

www.ourfactsyourfuture.org

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May 2005

Montana Economy at a Glance



THE PROVERBIAL CAN OF WORMS: SORTING OUT INCOME STATISTICS

By Robert C. Marvin



Have you ever wanted to torture an economist? Sure, we all have. Perhaps the most effective method is to ask a “simple” question (for an economist, there’s no such thing). For instance, just try asking an economist about the “average income” in your area. Depending on the temperament of the economist, you’re likely to receive anything from a disgusted sigh to a patient and knowing grin that says, “Well, it’s not quite that simple.”

Since we at the Research & Analysis Bureau have a vested interest in the humane treatment of economists, we offer the following article to clarify the differences among the various types of income statistics. Because there seems to be an infinite number of ways to measure income, this article will focus on the three types of income estimates available on www.ourfactsofyourfuture.org: **BEA Personal Income**, **Median Household Income**, and **HUD Median Family Income**.

But Which Estimate is the Best?

Before enumerating the differences among the income estimates, it is important to note that no one estimate is “better” than another. Each program measures income in a different way. For instance, Median Household Income includes single individuals living alone, while Median Family Income includes only households containing at least two related people. The question of which estimate to use always depends on what you are trying to find out. Someone trying to get a sense of an area’s general economic well-being might look at per capita personal income, while a researcher investigating families in poverty would benefit from the HUD median family income. To gain the most complete picture of an area’s economy, it is often necessary to compare several types of income estimates, and to understand the differences among them.

BEA Personal Income

The Bureau of Economic Analysis (BEA) produces two income estimates found on www.ourfactsofyourfuture.org: **Per Capita Personal Income** and **Total Personal Income**. Really, these are the same estimate, since each uses the same methodology and definitions. Per capita personal income is simply total personal income for a specific area divided by the number of people in that area. But how is “personal income” defined?

In general terms, personal income is all of the money people receive in a year, regardless of the source.¹ For the BEA, however, the definition is a little more limited. John Ruser (et al.) defines BEA personal income as “the income received by persons from participation in production, from government and business transfer payments, and from government interest.”² This includes wages, property income, proprietors’ income, employer contributions to employee pension and insurance funds, income received by non-profit institutions serving households, private non-insured welfare funds, and private trust funds. Income

from capital gains and the sale of assets (that is, income not earned in production) is not included.²

BEA personal income also differs from the other estimates in how the data is collected. BEA estimates are derived mainly from administrative records, including state unemployment insurance programs, the Internal Revenue Service, veteran’s benefits programs, and the U.S. military payroll systems. Censuses, such as the USDA’s Census of Agriculture and the U.S. Census Bureau’s Census of Population and Housing, are also used.²

BEA personal income estimates provide a “big picture” (macroeconomic) snapshot of the economic well-being of a geographic area. They help federal agencies project tax revenues, energy and water use, and the need for public services. They also help the federal government determine how to allocate \$167 billion, and for determining matching grants.² Private agencies also use BEA personal income estimates in market and economic research. Both per capita and total personal income is available for the U.S. & Montana for the years 1969 through 2004, and for all Montana counties and metro- and micropolitan statistical areas for the years 1969 through 2000.

Median Household Income

The U.S. Census Bureau’s Small Area Income and Poverty Estimates (SAIPE) program produces the median household income estimates. These estimates differ from the BEA’s in a number of ways. Most importantly, SAIPE estimates income based on “households” rather than on every individual person. A “household,” as defined by the U.S. Census Bureau, “includes all the people who occupy a housing unit,”

The screenshot shows the homepage of the Montana Department of Labor & Industry - Research & Analysis Bureau. The main content area features a photograph of a modern building with a red brick facade and large windows. The sidebar on the left contains links for 'Search', 'Advanced Search', 'TOUR', 'Media Releases', 'Publications', 'Census', 'Wage', 'Prevailing Wage Statistics in Brief', 'Montana Ranks', 'State & County Fliers', 'Top Employers', 'Contact Us', 'Organization Chart', 'Reservation Data', 'Calendars', and 'Links'. The top navigation bar includes 'Home', 'My Future', 'Career Resource Network', 'Labor Market Info', and 'Data Analysis'. The sidebar menu has a section titled 'Country Employment Projections' with sub-links for 'Occupations and Industries', 'Montana Employment and Labor Force Statistics', 'Occupational Employment Projections', 'Occupational Employment Statistics (OES) Vagel', 'Population', and 'Short Term Industry Employment Projections'. A callout box in the bottom right corner provides a detailed explanation of employment projections, mentioning small errors in current employment inputs and their impact on employment levels and wage levels. A yellow arrow points to the 'Country Employment Projections' link in the sidebar, and another yellow arrow points to the explanatory callout box.

To find income information on www.ourfactsofyourfuture.org, select “Income” from the drop down menu under the “Data Analysis” tab. To create a custom table, you will be asked to select a number of options, such as the locations and time periods for the data. Remember, you may select more than one option by holding down the control key as you click with your mouse.

6 Select Income Type

Median Household Income
HUD Median Family Income
Total Personal Income
Per Capita Personal Income

¹Jacob De Rooy, “Economic Literacy: What Everyone Needs to Know About Money & Markets,” Three Rivers Press, NY, 1995. p.175.

²From “Alternative Measures of Household Income: BEA Personal Income, CPS Money Income, and Beyond,” by John Ruser (BEA), Adreienne Pilot (BEA), and Charles Nelson (U.S. Census Bureau). Available for download at <http://www.bea.gov/bea/about/fesac/AlternativemeasuresHHincomeFESAC61104.pdf>.

whether or not those people are related. A housing unit can be anything from a house to a mobile home to a single room, as long as it is intended to be a separate living quarters. Thus, a “household” can be a family, three roommates sharing a house, or a single person.

While per capita personal income estimates the “average” income for an area, median household income instead expresses the “median” income. While an average is calculated by dividing the total income by the number of units added together to get that total, a median is the number that falls directly in the middle of an ordered list of all incomes in an area. That is, half of the incomes on that list will be greater than the median income, and half will be less.

Median household income also differs from BEA personal income in the types of income it includes. For instance, it does not include employer contributions to health and pension funds, or certain transfer payments like Medicare, Medicaid, and food stamps. However, it does include income from government employee retirement plans, private pensions and annuities, and interpersonal transfers, such as child support payments, as well as personal contributions to social insurance.² According to Ruser, this approach to estimating income focuses on current, rather than future, economic well-being, since it excludes contributions to pension plans and other factors that affect future prosperity.

The data source for median household income estimates also differs from those used by the BEA. The SAIPE program generates estimates by modeling the relation between income and tax and program data from the Current Population Survey’s (CPS) Annual Social and Economic Supplement (ASEC).³

Like BEA personal income estimates, median household income estimates act as an indicator of economic well-being for an area. But the focus is on the household unit rather than every individual. SAIPE estimates are produced mainly to determine poverty levels, though the information is used by a diverse assortment of agencies and individuals for a variety of reasons. Median household income data is available at the nationwide, state, and county levels. Since the estimate was not produced annually until 1997, information is available for the years 1989, 1993, 1995, and 1997-2002.

HUD Median Family Income

The Department of Housing and Urban Development (HUD) uses an entirely different unit to measure income: the family. The U.S. Census Bureau defines a “family” as “a householder and one or more other people living in the same household who are related to the householder by birth, marriage, or adoption,” adding that “a household can contain only one family for purposes of tabulations.”⁴ Thus, the distinguishing characteristic of family income estimates is that they exclude single individuals and unrelated groups of people living together.

Until recently, HUD estimates were based on decennial census median family income estimates, and updated with a combination of CPS estimates and BLS (Bureau of Labor Statistics) earnings and wage data. However, the fiscal year 2004 estimates, and future estimates, rely more on the Census American Community Survey (ACS). The ACS is an annual survey

conducted by the Census Bureau to supplement and update information from the decennial census. ACS participants are selected at random and asked directly about eight different sources of income.⁵ Since it is a part of the U.S. Census, participation is required by law.

HUD median family income estimates are primarily used as a basis for determining income limits for housing programs, but can be used for any number of other research projects. Information is available at the nationwide, state, and county levels for the years 2000-2004.

Availability Table		
Data	Areas	Years
Median Household Income	U.S., MT, counties	1969-2002
HUD Median Family Income	U.S., MT, counties	2000-2004
BEA Personal Income	U.S. & MT	1969-2004
	Counties, Metros, & Micros	1969-2000

Does Montana’s Average Income Really Rank Lowest in the Nation?

In short, no. There is a lot of confusion over Montana’s highly-publicized ranking of 50th in the nation for annual average wage. What Montanans need to know is that annual average wage is a very different measurement from the income estimates discussed in this article. Rather than an estimate of total income, annual average wage is a direct count of one source of income: wages per job. The following section will highlight some of these differences between annual average wage and true income estimates.

Annual Average Wage (QCEW Program)

Annual average wage comes from the Quarterly Census of Employment and Wages (QCEW) program. It differs from income estimates because it measures only one income source: wages. While the income estimates measure total income per person, household, or family, annual average wage measures wages per job, regardless of how many jobs an individual holds. While income estimates are broken down by state, county, and sometimes statistical area, annual average wage is further broken down by industry, allowing users to determine not only the overall average wage per job, but also the average wage per job within a specific industry.

The data that goes into producing QCEW numbers comes from employers covered by Montana unemployment insurance. This means that certain workers are not represented, including unpaid family workers, members of the armed forces, the self-employed, proprietors, domestic workers, and railroad workers covered by the railroad unemployment insurance system. In the calculation of annual average wage, most states include bonuses, stock options, severance pay, the cash value of meals and lodging, tips and other gratuities, and (in some states) employer contributions to certain deferred compensation plans, such as 401(k) plans.⁶

(continued on back page)

³“Introduction to the SAIPE Project,” from the U.S. Census Bureau’s website at <http://www.census.gov/hhes/www/saipe/nontechdoc/intro.html>

⁴From the U.S. Census Bureau’s subject definitions at http://www.census.gov/acs/www/UseData/Def/Hhld_rel.htm.

⁵“American Community Survey: A Handbook for State and Local Officials,” available for download at <http://www.census.gov/acs/www/Downloads/ACS04HSLO.pdf>

⁶“Quarterly Census of Employment and Wages (ES-202—Program - Overview” from the Bureau of Labor Statistics website at <http://bls.gov/cew/cewover.htm>

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At the present, www.ourfactstourfuture.org does not provide annual average wages at the county level. However, we do provide weekly average wages, which come from the same source, and may be multiplied by 52 to get annual average wages. Weekly average wages are available at the state and county levels for the years 2000-2003, and at the nationwide level for 2003. These can be found by choosing "Employment and Earnings (ES-202/QCEW)" from the drop-down menu under the "Data Analysis" tab.

So, How Does Montana's Income Compare Nationwide?

Table 1 compares the three types of income statistics covered in this article with the annual average income. As you can see, though Montana ranks relatively low in each estimate, it ranks last only in one.

Please note that 2002 estimates were used for purposes of comparison, since this is the most recent year for which all four statistics are available. Table 2 provides more recent numbers.

It is important to have several ways to measure income, because each estimate fills in a slightly different piece of the economic puzzle. However, because there exists a variety of income statistics, one number is sometimes chosen over the others to support a specific point of view. That is why it is especially important for people to understand where these estimates come from, what differences exist among them, and where to find them. It also saves economists a lot of explaining.

Table 1: Year 2002 Comparison

BEA Per Capita Personal Income:	\$24,557	Rank: 46th
Median Household Income:	\$34,105	Rank: 46th
HUD Median Family Income:	\$41,700	Rank: 45th
Annual Average Wage:	\$26,001	Rank: 50th

Table 2: Most Recent Numbers

BEA Per Capita Personal Income (2004):	\$26,857	Rank: 45th
HUD Median Family Income (2005):	\$48,150	Rank: 43rd
Annual Average Wage (2004):	\$27,832	Rank: 50th

MAIL OR E-MAIL?

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